

Reply to Office Action dated January 10, 2008

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for controlling an inverter pulse width modulation (PWM) frequency of a liquid crystal display (LCD) in a portable computer, comprising:

identifying an LCD ~~frame frequency~~ refresh rate recorded in extended display identification data (EDID) of a memory provided in an LCD;

deriving a PWM frequency of an inverter adapted to control a brightness of the LCD, ~~responsive to wherein the deriving is based on the identified LCD frame frequency,~~
~~wherein the EDID includes an average frame frequency, and the PWM frequency is derived based on the average frame frequency refresh rate;~~ and

driving the LCD in accordance with the derived PWM frequency of the inverter.

2. (Canceled)

3. (Original) The method of claim 1, wherein the memory is a non-volatile memory.

4. (Original) The method of claim 1, wherein the portable computer is configured to receive a plurality of LCDs, wherein at least two of the LCDs have different frame frequencies.

5. (Original) The method of claim 4, wherein the plurality of LCDs are made by different vendors.

6-8. (Canceled)

9. (Currently Amended) The method of claim 1, further comprising:
installing a replacement LCD;
identifying an LCD replacement ~~frame frequency~~ refresh rate recorded in a memory provided in the replacement LCD, wherein the LCD replacement ~~frame frequency~~ refresh rate is different from the LCD ~~frame frequency~~ refresh rate;
deriving a replacement PWM frequency of the inverter, ~~responsive to wherein~~ deriving the replacement PWM frequency is based on the identified LCD replacement frame frequency refresh rate; and
driving the replacement LCD in accordance with the derived replacement PWM frequency of the inverter.

10. (Canceled)

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11. (Currently Amended) An apparatus that controls an inverter pulse width modulation (PWM) frequency of a liquid crystal display (LCD) in a portable computer, the apparatus comprising:

a memory recorded with extended display identification data (EDID) for an LCD, the memory provided in a lamp of the LCD or in the LCD;

an inverter that supplies a voltage to the LCD; and

control means for controlling a PWM frequency of the inverter in accordance with an LCD ~~frame frequency~~ refresh rate corresponding to information in the EDID, wherein the ~~EDID includes an average frame frequency for the LCD, and~~ the control means controls the PWM frequency based on the ~~average frame frequency~~ LCD refresh rate.

12. (Canceled)

13. (Currently Amended) The apparatus of claim ~~[[12]]~~11, wherein the memory includes identification data for a plurality of LCDs.

14. (Currently Amended) The apparatus of claim ~~[[12]]~~11, wherein the control means sets the PWM frequency of the inverter to a frequency that does not substantially interfere with ~~[[the]]~~a vertical sync frequency.

15-17. (Canceled)

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18. (Currently Amended) The apparatus of claim 11, wherein the apparatus is adapted to receive a plurality of LCDs each having an LCD lamp, and wherein at least two of the LCDs lamps have different ~~frame frequencies~~ refresh rates.

19-20. (Canceled)

21. (Currently Amended) A portable computer, comprising:

- a main processor in a base module housing an input device;
- a display coupled to the main processor to display data received from the processor;
- a memory recorded with extended display identification data (EDID) for a liquid crystal display (LCD) of the display;
- an inverter that supplies a voltage to the LCD; and
- a controller coupled to the main processor that controls a pulse width modulation (PWM) frequency of the inverter ~~in accordance with~~ based on an LCD frame frequency refresh rate included in the EDID, wherein ~~the EDID includes an average frame frequency for the LCD, and~~ the controller controls the PWM frequency based on the ~~average frame frequency~~ LCD refresh rate.

22. (Original) The portable computer of claim 21, wherein the display is rotatably coupled to the base module.

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23. (Currently Amended) The portable computer of claim 21, wherein a plurality of LCDs each having an LCD lamp are installed in the display, wherein at least two of the LCD lamps have different ~~frame frequencies~~ refresh rates.

24-31. (Canceled)

32. (Previously Presented) The portable computer of claim 21, wherein the memory stores a plurality of PWM frequencies.

33. (Previously Presented) The portable computer of claim 32, wherein the controller selects one of the plurality of PWM frequencies based on a selected LCD frame frequency that corresponds to the average frame frequency.

34. (Previously Presented) The method of claim 1, wherein the derived PWM frequency of the inverter is derived by selecting one of a plurality of PWM frequencies stored in the memory.

35. (Previously Presented) The method of claim 34, wherein the selected one of the plurality of PWM frequencies is selected based on LCD refresh rate corresponding to the identified LCD frame frequency.

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36. (Previously Presented) The apparatus of claim 11, wherein the memory stores a plurality of PWM frequencies.

37. (Previously Presented) The apparatus of claim 36, wherein the control means selects one of the plurality of PWM frequencies.

38. (Previously Presented) The apparatus of claim 37, wherein the control means selects the one PWM frequency based on a selected LCD frame frequency that corresponds to the average frame frequency.